



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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D205-634-141
Job Sheet 203967



Part No: D205-634-141 **Job Qty:** 1 pcs
Part Name: Replacement Skidtube with Run-on Landing Wearplates Fits LH or RH

Part Weight: 0 lbs **Status:** New **Priority:** Medium
Job Created: 11/29/19 **Job Tracking No:**
Due Date: 12/24/19 **Created By:** Marie Lajeunesse
Type: SOLD **Description:**
Note: D205-634 REV.I/ D2580 REV.H IPP RevA 11.09.14 new issue EC verified by:DD IPP REV:B 12.01.23 AS PER ECN11-684 DD VERF:EC IPP REV:C 13.03.21 AS PER ECN13-544 DD VERF:JLM
Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Skidtubes - 1	1 pcs	12/24/19		0.00	2.00	Skidtubes - 1		
							Skidtubes - 2		
							Skidtubes - 3		MAC
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
120	Skidtubes - Bend - 2 - B4B	1 pcs	12/24/19		0.50	1.00	Skidtubes - Bend - B4B		MAC
130	Skidtubes - 2 - B4B	1 pcs	12/24/19		0.00	2.00	Skidtubes - 1 - B4B		
							Skidtubes - 2 - B4B		
							Skidtubes - 3 - B4B		
							Skidtubes - 4 - B4B		TF
							Skidtubes - 5 - B4B		
							Skidtubes - 6 - B4B		
							Skidtubes - 7 - B4B		
140	QC 5	1 pcs	12/24/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		BE
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		



Container No: S237052



Part: D205-634-141

Job No: 203967

Serial No/Batch: S237052

Revision: H/I

Inspector:

Exp Date:

Instructions: TC STC SH96-88 Issue 2, FAA STC SR005631

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
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www.dartaero.com

					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
150 Skidtubes - 3 - B4B	1 pcs	12/24/19	0.00 2.00		Skidtubes - 1 - B4B	
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
					Skidtubes - 4 - B4B	TF
					Skidtubes - 5 - B4B	BE
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
160 QC 10	1 pcs	12/24/19	0.00 0.00		QC 10 - 10	
					QC 10 - 18	
					QC 10 - 24	
					QC 10 - 43	
					QC 10 - 50	
					QC 10 - 58	
					QC 10 - 9	
					QC 10 - 68	DAS DEC 12 2019 68
170 QC 5	1 pcs	12/24/19	0.00 0.00		QC 5 - 10	9-89
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	DAS
					QC 5 - 68	DEC 12 2019 68
					QC 5 - 9	9-89
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
180 Handfinish - 2-1 Pressure- B4B	1 pcs	12/24/19	0.00 0.50		Handfinish - 2 - 1 - B4B	
					Handfinish - 2 - 2 - B4B	DEC 12 2019
					Handfinish - 2 - 3 - B4B	
					Handfinish - 2 - 4 - B4B	
190 Powdercoat - 1 White Gl(A)- B4B	1 pcs	12/24/19	0.00 0.80		Powdercoat - 1 - B4B	
					Powdercoat - 2 - B4B	
					Powdercoat - 3 - B4B	31 12 17
					Powdercoat - 4 - B4B	
200 QC 3	1 pcs	12/24/19	0.00 0.00		QC 3 - 10	
					QC 3 - 13	
					QC 3 - 15	14-12-16
					QC 3 - 17	
					QC 3 - 18	
					QC 3 - 2	
					QC 3 - 28	
					QC 3 - 3	
					QC 3 - 30	
					QC 3 - 34	

				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
				210 Handfinish - 3-1- WingWalk- B4B	1 pcs
Handfinish - 3 - 2 - B4B	BEB 19-12-18				
Handfinish - 3 - 3 - B4B					
Handfinish - 3 - 4 - B4B					
Handfinish - 3 - 5 - B4B					
220 QC 5	1 pcs	12/24/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	DAS DEC 18 2019 68
				QC 5 - 9	9-89
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
230 Packaging 3-1 - Stock - B4B	1 pcs	12/24/19	0.00 0.00	Packaging 3 - 1 - B4B	JRB
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	

				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
235 DC - 1 - B4B	1 pcs	12/24/19	0.00 0.00	DC - 1 - B4B	DAS DEC 19 2019
				DC - 2 - B4B	
240 QC 21 - FG	1 pcs	12/24/19	0.00 0.00	QC 21 - FG - 21	DAS DEC 19 2019
				QC 21 - FG - 70	
				QC 21 - SA - 53	

Part Op 110 - (Skidtubes)1- PICK D2580-1 2- SPOT DRILL 2 AFT RUN ON WEARPLATE HOLES USING DT10021, DRILL

Descriptions: 3.630" HOLES USING DT8462 (83.94" FROM AFT OF D2580-1 REF. ONLY)

120 - (CNC Delta 100 Bender)1-Bend as per program D2580.C on CNC Bender and Folio FT 16

130 - (Skidtubes)1-Deburr ends after cutting and remove bending marks. Prepare tube for welding D2576-3 step remove alodine as required. 2-Locating from most fwd saddle hole, drill most fwd wearplate hole using DT9793 (10.832 REF) as per dwg D2580 sheet 7. 3-Open run-on wearplate holes to finished size 0.508" at locations (5.338/ 5.985/ 10.832/ 3.63 REF) as per dwg D2580 sheet 7. 4-Drill pilot holes for aft cap using DT8215, Open to finished size.

140 - (QC5- Inspect part completeness to step on W/O)

150 - (Skidtubes)1-Weld step D2576 as per Dwg. D2580 and QSI 004 A/R Aluminum Rod 139019 2-Touch up alodine on run on wearplate holes prior to swaging 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg 4-DRILL TOWING HOLE USING DT8091 5-DEBURR

160 - QC10- Inspect visual per QSI004- ground welds)

170 - QC5- Inspect part completeness to step on W/O) Production .0000 * Attachments 180 HandFinish And realodine tube as per QSI 005 HandFinish2 (Pressure Wash p

180 - (Pressure Wash per QSI005 4.3/ Clean and remove all markings)And realodine tube as per QSI005

190 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) START TIME: 10:15 O.T: 3:00 FINISH: 10:45

200 - (QC3- Inspect Part Finish)

M211886

- 2403
2030
- 210 - (Assemble as per dwg)1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 5231095 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594 3- Install aft cap as per dwg 4- Wing walk as per dwg Batch# 3229693
- 220 - (QC5- Inspect part completeness to step on W/O)Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024
- 230 - 1 (Identify as per dwg & Stock Location:)Identify and pack for shipping as per PPPD205-634-141 Location : FG084
- 235 - (Document Control)Photocopy D205-634 bluefile & type labels per PPP D205-634-141 CHG004
- 240 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2580-1	205 Bent Tube	1 pcs (1 ea)	110-Skidtubes - 1	5224585
D2576-3	Step (Machining Detail)	1 pcs (1 ea)	150-Skidtubes - 3 - B4B	5177095
D4202-1	Spacer	24 pcs (24 ea)	150-Skidtubes - 3 - B4B	5197211
AN3-5A	Bolt	2 Ea (2 ea)	210-Handfinish - 3-1- WingWalk-B4B	5216385
AN4-45A	Bolt	8 Ea (8 ea)	210-Handfinish - 3-1- WingWalk-B4B	5241397
D2570	Bushing	16 pcs (16 ea)	210-Handfinish - 3-1- WingWalk-B4B	5232725
D2594-1	Plug	8 pcs (8 ea)	210-Handfinish - 3-1- WingWalk-B4B	5229062
D2594-3	O-Ring	8 pcs (8 ea)	210-Handfinish - 3-1- WingWalk-B4B	5045932
D2855	Cap	1 pcs (1 ea)	210-Handfinish - 3-1- WingWalk-B4B	5126188
D4406-041	Fwd Wearplate Assembly	1 pcs (1 ea)	210-Handfinish - 3-1- WingWalk-B4B	5238692
D4406-043	Aft Wearplate Assembly	1 pcs (1 ea)	210-Handfinish - 3-1- WingWalk-B4B	5239259
MS21042-4	Nut	8 Ea (8 ea)	210-Handfinish - 3-1- WingWalk-B4B	5158589
NAS1149D0332J	Washer	2 Ea (2 ea)	210-Handfinish - 3-1- WingWalk-B4B	5178378

M. H. 013534

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - 1	D2580-1	1	10	0
150-Skidtubes - 3 - B4B	D2576-3	1	59	0
	D4202-1	24	1,222	0
210-Handfinish - 3-1- WingWalk-B4B	AN3-5A	2	199	0
	AN4-45A	8	29	0
	D2570	16	512	0
	D2594-1	8	188	0
	D2594-3	8	277	0
	D2855	1	67	0
	D4406-041	1	2	0
	D4406-043	1	2	0
	MS21042-4	8	68	0
	NAS1149D0332J	2	2,879	0

Part Specifications

Specifications could not be found.

ITEM	QTY -041	QTY -045	QTY -047	QTY -048	PART NUMBER	DESCRIPTION
1	X				D2680-041	SKIDTUBE ASSEMBLY
2		X			D2680-048	SKIDTUBE ASSEMBLY
3			X		D2680-047	SKIDTUBE ASSEMBLY
4				X	D2680-046	SKIDTUBE ASSEMBLY
20	1	1	1	1	D2680-1-100	EXTENSION
21		16	16	16	D2670	BUSHING
22	1	1	1	1	D2678-3	STEP
23		4			D2679	SPACER
24	16	16	6	6	D2684-1	PLUG
25	16	16	6	6	D2684-3	O-RING
26	1	1	1	1	D2688	208 WEB
27	1	1	1	1	D2685	AFT CAP
28	1	1	1	1	D2684-5	WEARSHOE
29	1	1			D2684-9	WEARSHOE
30	1	1	1	1	D2684-11	WEARSHOE
31	1	1			D2684-13	WEARSHOE
32	20	20	24	24	D4602-1	SPACER
33			1	1	D4609-041	WEARPLATE ASSEMBLY
34			1	1	D4609-043	WEARPLATE ASSEMBLY
35				1	D6001-1	PHD WEARPLATE
36				1	D6001-3	AFT WEARPLATE
90	90	90			AL57-1002-130 or AK57-1002-130 or AK54-1002-130 or AEL5-1002-130	INERT
91	60	60			AK54A	BOLT
92	2	2	2	2	AK5-5A	BOLT
93			8	8	AK4-4A	BOLT
94	60	60			NA8114903058R	WASHER (AK900C10L)
95	2	2	2	2	NA811490332J	WASHER (AK900C10L)
96			6	6	MS2102-4	NUT (DR MS210424)

GENERAL NOTES:

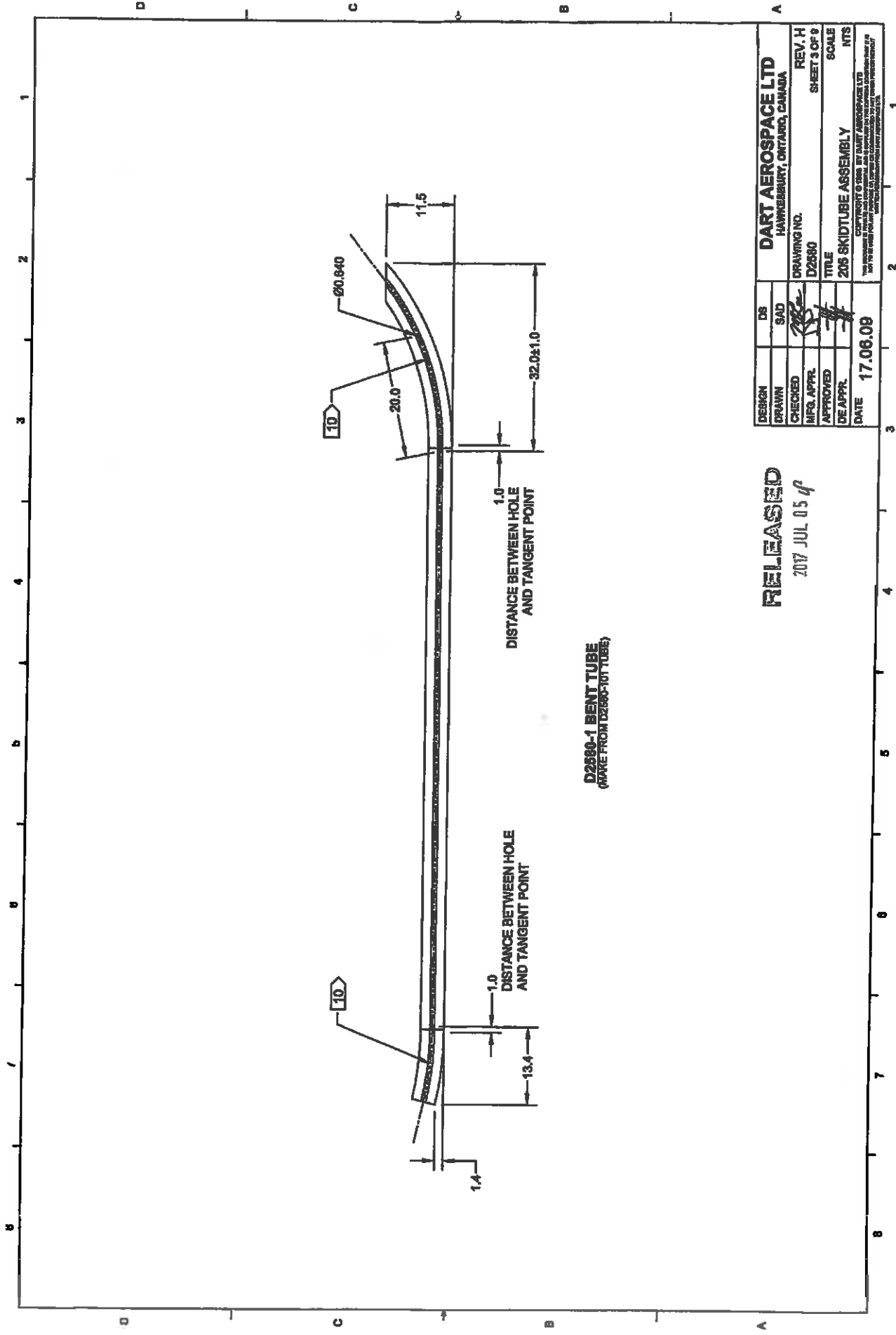
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART CSI 006 4.1 PRIOR TO INSERTING D2680 WEB POWDER COAT (-047/-049) GLOSS WHITE (REF 4.3.1.1) PER DART CSI 006 4.3 POWDER COAT (-046) GREEN SANDTEX (REF 4.3.2.6) PER DART CSI 006 4.3 BLACK ANTI-SPID PAINT AS INDICATED PER DART CSI 006 4.4.
- 3) TOLERANCES ARE PER DART CSI 016 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2680-041 = 35.7 lbs
D2680-045 = 33.7 lbs
D2680-047 = 45.1 lbs
D2680-048 = 32.0 lbs
- 8) WELDING PER DART CSI 004.
- 9) INSERT D2680 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SHAPFLEX-2X1 ADHESIVE PER DART CSI 016 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS 6" RADIUS WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND BEND WITH A MINIMUM RADIUS OF 30. A MINIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DTE217 & DTE217 ONLY FOR D2680-041/048 TO LOCATE AND DRILL 90/367 HOLES FOR WEARSHOE INSERTS. INSTALL AL57-1002-130 PER SECTIONS 9.2 AND F-F (60 SHAPFLEX-2X1-291. INSTALL AK54A BOLTS AND NA811490332R WASHERS WITH SPACER AT THIS LOCATION.
- 12) INSERT D2684-1 PLUS CMT D2684-3 O-RING IN HOLES MARKED "P" BOTH SIDES OF TUBE AFTER FINISH (16 PLACES FOR D2680-041-046 AND 8 PLACES FOR D2680-047/048).
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2685 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION.

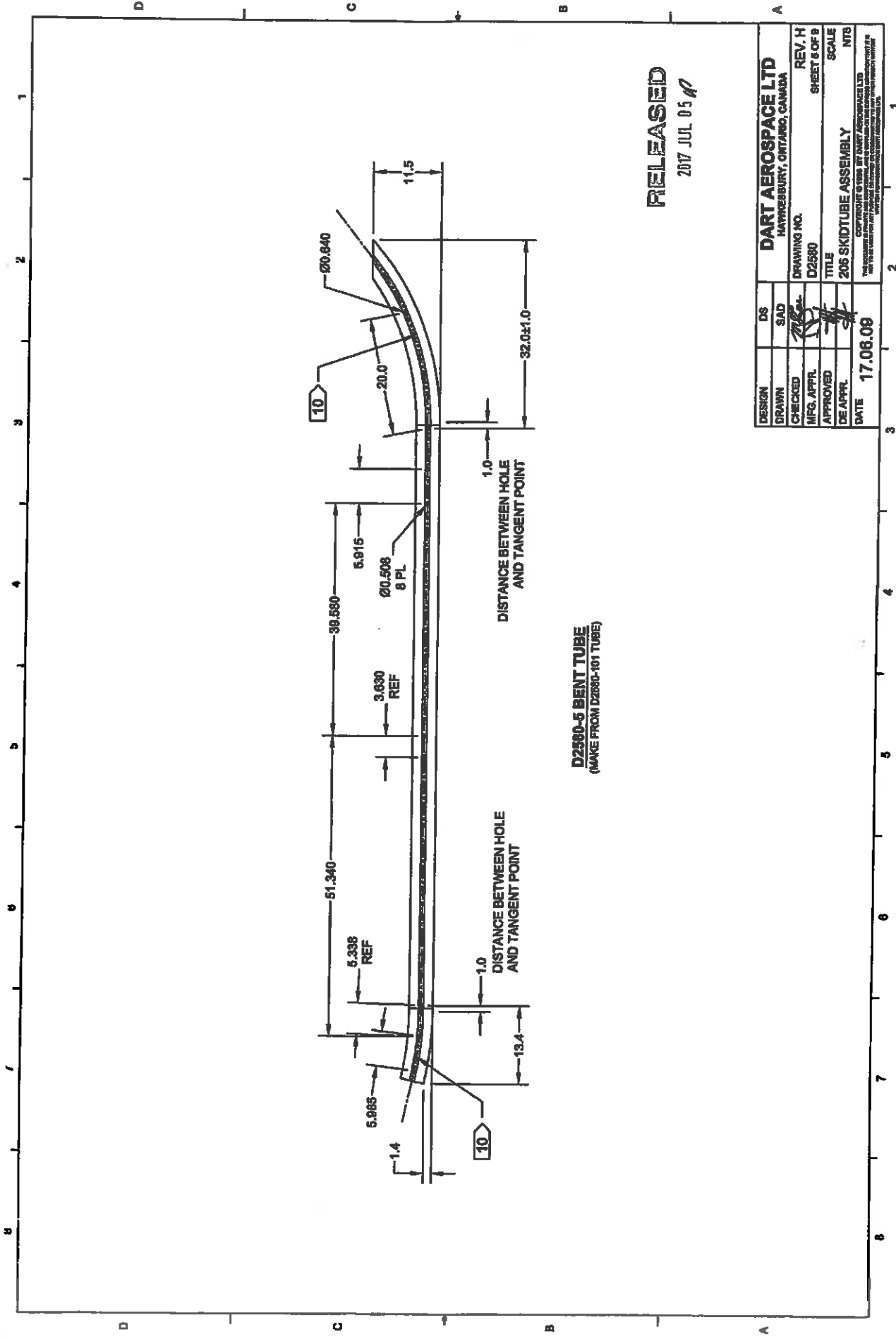
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RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 703967 M05
19-1-29

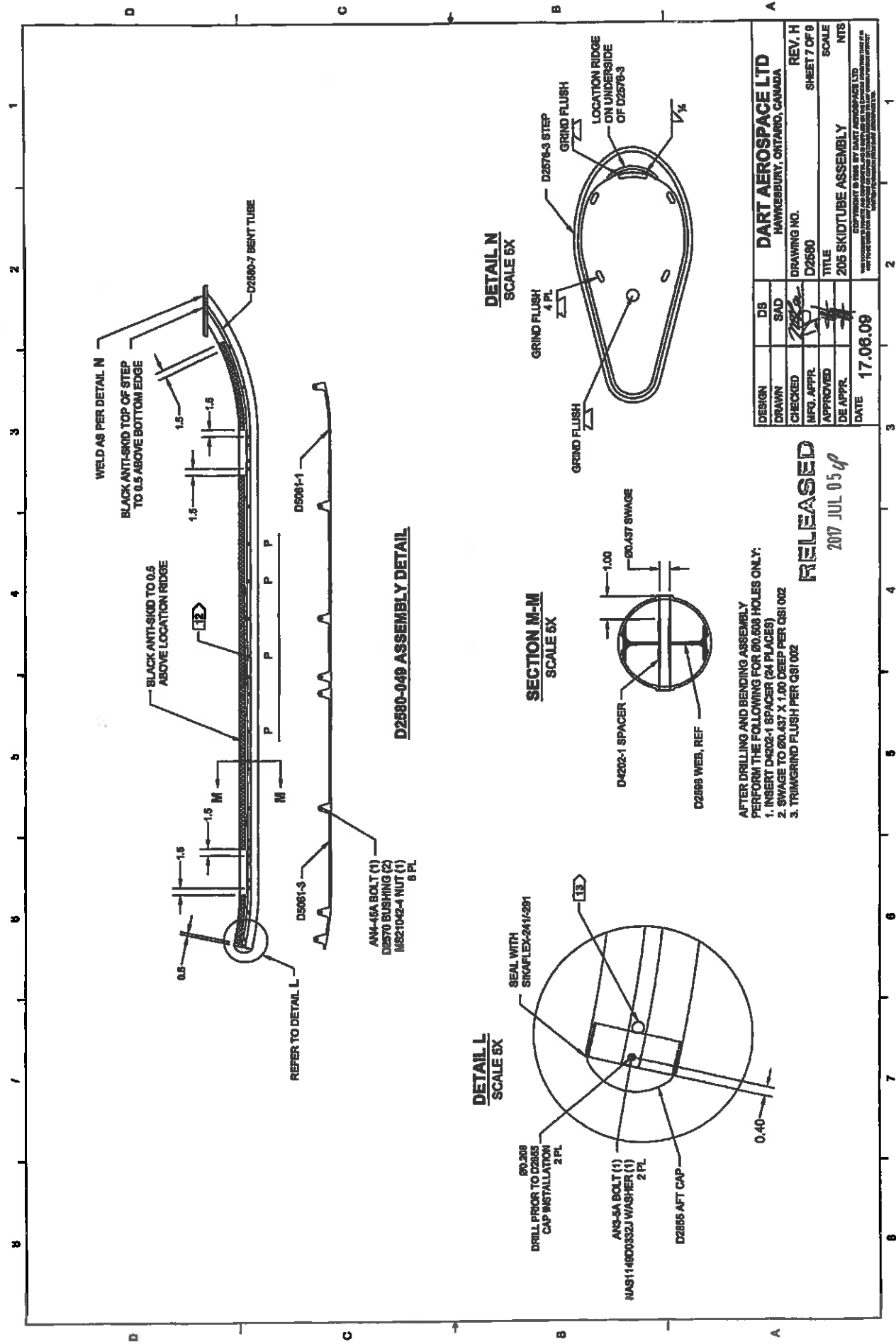
RELEASED
2017 JUL 05 09
EXC-7-509

H	SHEET 1: PL DELETE D2684-1/041-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS	SAD	17.06.09
G	ADDED -048 -047 WEIGHT UPDATED PER DSI 0088	AUS	14.04.08
F	INCORPORATE DSD D2680-E-1 PER PART 9-216	DC	13.02.20
E	ADD D2680-047 (ZN CA-7) AND D2680-7 (ZN BS-6) INCLUDED DSD D2680-O-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DTE217 & DTE607 WAS TDE217-205 (ZN CA-1)	RP	11.06.21
D	CHANGE TO 88 WEARPLATES AND GASKETS. INCLUDE DSD 5124/5193	PH	07.04.06
C	REDRAWN, INCLUDED DSD 0041 0097	CP	06.06.26
B	AS MANUFACTURED	DS	06.12.02
A	NEW ISSUE	DS	06.02.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	SAD		
CHECKED	<i>[Signature]</i>		
INFS. APPR.	D2680	DRAWING NO.	REV. H
APPROVED	<i>[Signature]</i>	SHEET 1 OF 9	
DATE	17.06.09	TITLE	SCALE
		205 SKIDTUBE ASSEMBLY	NTS

DART AEROSPACE LTD
HAWKSBURY, ONTARIO, CANADA

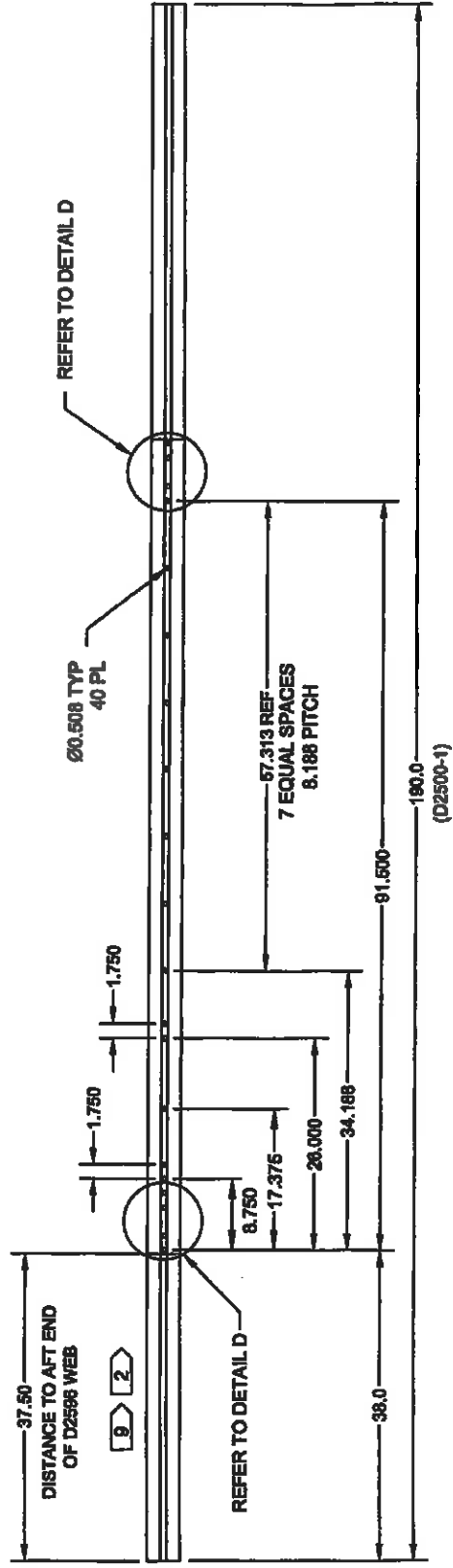




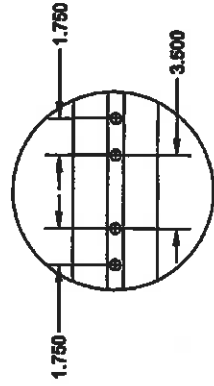


DECEMBER

2017 JUL 05 48



D2580-101 TUBE



DETAIL D
SCALE 5X

RELEASED
2017 JUL 05 11

DESIGN	D8	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	SAD	
CHECKED		DRAWING NO. REV. H
MFG. APPR.		D2580 SHEET 8 OF 8
APPROVED		TITLE
DATE	17.06.09	205 SKIDTUBE ASSEMBLY
		SCALE NTS
		DESIGNED BY TMM BY DART AEROSPACE LTD
		THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE TITLE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



Route update only ☐

NCR No. _____

Job: _____ Part No. _____		DISPOSITION ☐ Rework ☐ Scrap ☐ Use-as-is		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier ☐ Quality ☐					
Date :	Sequence #:	QTY Affected :		MRB (QS1042)					
Description Work Order Deviation				Disposition					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐				FAULT CATEGORY Pressure/Forced ☐ Contamination ☐ Power Loss/Surge ☐ Bending ☐ Misaligned/off center ☐ Folio/Program ☐ Crushing ☐ BOM/Route ☐ Grain Direction ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Incomplete/Unclear Instructions ☐ Wrong Stock Pulled ☐ Marks/Chatter ☐ Drill Holes ☐ Out of Sequence ☐ Mislabeled ☐ Fit/Function ☐ Off-set/Set-up ☐ Other/Details: _____					